

REMARKS

Claims 1, 4, 5, 7, 8, 10, and 16-18 are pending in the application. New claim 18 has been added.

Terminal Disclaimer

The terminal disclaimer filed on January 30, 2009 was not entered because the signee's name is not printed on the terminal disclaimer.

In view of this, a terminal disclaimer signed by the attorney whose name is printed thereon has been submitted herewith.

The Examiner is respectfully requested to approve and enter the terminal disclaimer, and reconsider and withdraw the Double Patenting rejection.

Double Patenting

Claims 8 and 10 have been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5, 7, 8, 10, and 11 of copending application No. 10/550,002.

In view of this, a terminal disclaimer has been submitted herewith to overcome this rejection.

The Examiner is respectfully requested to approve and enter the terminal disclaimer, and reconsider and withdraw this rejection.

Claim Rejections - 35 U.S.C. § 103

(a) Claims 1, 4, 5, 7, and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando et al. (JP 2001-276484) in view of Mueller et al. (USP 5,504,955), in

view of Kown (US 2002/0088061), in view of Hashimoto (USP 5,743,115). This rejection is respectfully traversed.

a. Combination of the cited references does not make the claimed subject matter obvious

According to the present invention, it is found that, “for a sufficient amount of metal ions to be absorbed in laundry, time is required that is longer by a certain degree than the time required for a treatment substance such as a softening agent to spread all over the laundry.” Accordingly, a configuration is adopted in which “a predetermined process in a laundry washing session is performed longer than in a case where no metal ions are added but a treatment substance is added.” As a result, the following benefits are obtained: a sufficient amount of metal ions attaches to laundry to exert a sufficient antimicrobial effect; by contrast, when a treatment agent alone is added, a laundry washing session takes less time, allowing more efficient handling of household chores.

Making the time required by “rinsing with addition of metal ions” and the time required by “rinsing with addition of a treatment substance” different in this way is not obvious to one skilled in the art even if he combines together the “ringing with addition of silver ions,” disclosed by Ando, the “rinsing with addition of a treatment agent,” disclosed by Mueller, and the “spin dry rinse cycle repeated three times,” disclosed by Hashimoto.

b. The “spin dry rinse” in Hashimoto does not correspond to the “rinsing” of the present invention

The spin dry rinse shown in Figs. 4 and 5 and described in col. 6, line 26 - col. 6, line 5 of Hashimoto involves spin-drying at 100 rpm for 1 minute with supply of water and spin-drying at

100 rpm for 2 minutes. This spin dry rinse cycle is repeated three times, with a ten-seconds' period with the motor off intervening between consecutive cycles.

Thus, the "spin dry rinse" in Hashimoto involves no period at all in which a water current occurs, and thus does not correspond to the "rinsing" of the present invention.

Further, whereas the rinsing in the present invention is for "attaching metal ions or treatment substance to clothes effectively," the spin dry rinse in Hashimoto is for "extracting detergent from clothes effectively." These are thus technically quite opposite.

Claims 4, 5, 7, and 16, dependent on claim 1, are allowable at least for their dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 8, 10, and 17 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Hashimoto. This rejection is respectfully traversed.

(Claim 8)

The timing of the "water-fed unbalance recovery" of Hashimoto differs from that of the present invention

It is clear that G15 and G16 in Fig. 3 of Hashimoto are performed after a washing process (G3) and before a rinsing process (spin dry rinse processes G19-G23). They are thus not performed after final rinsing as recited in claim 8.

According to claim 8 of the present application, when metal ions are added in final rinsing, drainage of the metal ions is prevented through correction of imbalance during squeezing.

In the first place, performing imbalance correction before a rinsing process (spin dry rinse processes G19-G23) as in Hashimoto does not solve the problem addressed by claim 8 of the present application (i.e., preventing drainage of the metal ions added in a rinsing process).

Even if “rinsing with addition of silver ions” of Ando is combined with “water-fed unbalance recovery” of Hashimoto, the silver ions attached to clothes in the “water-fed unbalance recovery G15 and G16” of Hashimoto are all drained off in the “spin dry rinse G19-G23” performed later in Hashimoto.

Claim 10, dependent on claim 8, is allowable at least for its dependency on claim 8.

(Claim 17)

The timing of the “water-fed unbalance recovery” of Hashimoto differs from that of the present invention

As discussed above in connection with claim 8, the timing of the “water-fed unbalance recovery” of Hashimoto differs from the timing of imbalance correction in the present invention recited in claim 17.

In addition, according to claim 8, when metal ions are added in final rinsing, instead of reducing the consumption of metal ions by not adding them in water-fed imbalance correction during squeezing, the user is notified that the antimicrobial effect by the metal ions may be weakened.

Even if “rinsing with addition of silver ions” of Ando is combined with “water-fed unbalance recovery” of Hashimoto, the silver ions attached to clothes in the “water-fed unbalance recovery G15 and G6” of Hashimoto are all drained off in the “spin dry rinse G19-G23” performed later in Hashimoto.

Thus, in the first place, combining Ando with Hashimoto does not allow metal ions to attach to clothes, and accordingly does not suffer from the problem addressed by claim 17 of the present invention (i.e., when the consumption of metal ions is reduced, the user is unaware of a possible reduction in the antimicrobial effect by metal ions).

In view of this, the Examiner is respectfully requested to reconsider and withdraw this rejection.

New Claim

Claim 18, dependent on claim 1, is allowable at least for its dependency on claim 1.

A favorable determination by the Examiner and allowance of this claim is earnestly solicited.

Conclusion

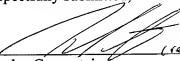
Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and objections, and allowance of the pending claims are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi, Registration No. 40417 at the telephone number of the undersigned below to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: December 15, 2010

Respectfully submitted,

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Attachment: Terminal Disclaimer